Watershed Evaluations

03050207-010

(Salkehatchie River)

General Description

Watershed 03050207-010 is located in Barnwell County and consists primarily of the ***Salkehatchie River*** and its tributaries from its origin to Turkey Creek. The watershed occupies 47,235 acres of the Sand Hills and Upper Coastal regions of South Carolina. The predominant soil types consist of an association of the Fuquay-Dothan-Varina-Blanton series. The erodibility of the soil (K) averages 0.14, and the slope of the terrain averages 4% with a range of 0-10%. Land use/land cover in the watershed includes: 41.1% forested land, 31.0% agricultural land, 14.2% barren land, 10.4% forested wetland, 1.8% urban land, 0.9% nonforested wetland, and 0.6% water.

Rosemary Creek (Folk Pond) and Buck Creek (Bolen Pond) join to form the Salkehatchie River, which flows through this watershed. There are a total of 59.8 stream miles and 583.3 acres of lake waters in this watershed, all classified FW.

Surface Water Quality

Station #	Type	Class	Description
CSTL-588	BIO	FW	ROSEMARY CREEK AT S-06-167
CSTL-578	BIO	FW	BUCK CREEK AT S-06-167
CSTL-028	P	FW	SALKEHATCHIE RIVER AT SC 64, 2MI W OF BARNWELL

Rosemary Creek (CSTL-588) **–** Aquatic life uses are fully supported based on macroinvertebrate community data.

Buck Creek (CSTL-578) **-** Aquatic life uses are fully supported based on macroinvertebrate community data.

Salkehatchie River (CSTL-028) - Aquatic life uses are fully supported. There is a significant decreasing trend in pH. Significant decreasing trends in five-day biochemical oxygen demand, total phosphorus, and total nitrogen concentrations suggest improving conditions for these parameters. In sediment, P,P'DDT and its metabolites P,P'DDD and P,P' DDE were all detected in the 1998 and 1999 samples. Although the use of DDT was banned in 1973, it is very persistent in the environment. A very high concentration of lead and a high concentration of zinc were also measured in the 1998 sediment sample. Recreational uses are fully supported and a significant decreasing trend in fecal coliform bacteria concentration suggests improving conditions for this parameter.

Nonpoint Source Management Program

Land Disposal Activities

Land Application Sites

LAND APPLICATION SYSTEM FACILITY NAME	*ND# TYPE*
SPRAYFIELD	ND0063061
WILLISTON/ROSEMARY CREEK WWTP	DOMESTIC

Growth Potential

There is a low to moderate potential for growth in this watershed, which contains portions of the Towns of Snelling, Elko, and Williston, the City of Barnwell, and the Savannah River Site (SRS). The Town of Snelling is located directly adjacent to SRS where S.C. Hwy 64 terminates at a controlled access/employee entrance to SRS. The Town of Snelling and the area adjacent to S.C. 64 (including a portion of Barnwell) are expected to continue experiencing slight growth due to their location to SRS's entrance.